

IN THE CLAIMS:

16. (New) A anti-microbial adhesion pharmaceutical composition comprising an effective amount of an isolated adhesion inhibitory fraction from *vaccinium* juice and a pharmaceutically acceptable carrier or diluent said isolated fraction having anti-adhesion activity against *H. pylori*.

17. (New) The composition according to ~~claim~~ 1, wherein said isolated fraction is selected from the group consisting assertially of PF-1, PF-2, and NDM.

18. (New) The composition according to claim 1, wherein said isolated fraction is present in a range of 1µg to 10mg per milliliter.

19. (New) A fortified food composition providing antimicrobial-adhesion activity comprising a suitable food carrier and an effective amount of an isolated adhesion inhibitory water extract fraction from *Vaccinium* having

- (a) a molecular weight of 14,000;
- (b) anti-adhesion activity against *H.pylori*;
- (c) an elemental analysis of carbon 43-51%, hydrogen 4 - 5%, no nitrogen, no sulfur and no chlorine;
- (d) a nuclear magnetic resonance (NMR) line spectrum as set forth in Figures 2A and 2B;
- (e) an ultraviolet spectrum with an absorption peak at 280 nm in neutral or acidic pH solution which is absent in alkali solutions; and
- (f) an adhesion inhibitory activity against P fimbriated bacteria.

20. (New) The composition as set forth in claim 19 wherein the food carrier is a fruit juice.

21. (New) The composition as set forth in claim 20 wherein the fruit juice is cranberry juice.

22. (New) An adhesion inhibitory fraction from a juice of berries of the *Vaccinium* plant genus exhibiting coaggregation reversal and coaggregation inhibition activity against *H.pylori* isolated by:

(a) dialyzing the juice extensively against double distilled water using dialysis tubing with a 14,000 molecular weight cut-off;

(b) lyophilizing the dialysate;

(c) fractionating the lyophilized dialysate on a polyacrylamide resin column; and

(d) eluting the fraction from the column with water.

23. The method of claim 22 wherein the fraction is eluted from the column with ammonia.